

A Large Indian Sea-Perch.

The dimensions and weight of a sea-perch caught in December last by some native fishermen near Diamond Harbour in the River Hooghly seem to me to be worth recording.

Its length is nearly seven and a half feet, its girth just behind the shoulder is a little more than five feet nine inches, and its weight, the day after its capture, was four hundred and sixty pounds.

The fish is so old and worn that its specific identity must remain in doubt, but it agrees fairly well with Day's description, in the "Fauna of British India," of *Epinephelus lanceolatus*, Bloch.

The largest Indian sea-perch of which I can find any record is the one mentioned by Russell (quoted by Day under *Epinephelus pantherinus* and *malabaricus*), which was taken at Vizagapatam in January, 1786, and measured seven feet in length, five feet in girth, and weighed upwards of three hundred pounds.

The scales of the Diamond Harbour monster are so altered by deposit that their accretion lines are very difficult to follow; but in a large scale from the shoulder I can count between 500 and 600 such lines, which are sometimes grouped in series of about eight, but oftener show no grouping at all.

A. ALCOCK.

Indian Museum, Calcutta, February 2.

Attractions of Teneriffe.

THOSE members of the British Association who visit South Africa this year will probably desire to spend as much time as they can near their journey's end. But it is just worth mentioning that some of the oceanic islands en route have very special attractions. For instance, I write from Teneriffe, which has igneous rocks, cinder cones, and lava streams for the geologist; and for the botanist all zones of vegetation from the subtropics to the snows. The scientific literature of the island is at present more in German than in English. A single day's excursion, 2000ft. up into the hills by electric tram, is possible whilst the steamer waits to coal. A week would allow of a short tour to Orotava and across the mountains to Guimar, through some of the most interesting parts of the island.

HUGH RICHARDSON.

SAMUEL PEPYS AND THE ROYAL SOCIETY.

MAGDALENE COLLEGE, Cambridge, with which the name of Samuel Pepys is indissolubly associated, held in his memory at the college on Thursday last, his birthday, a reunion which may become an annual event. Some of the institutions with which he was more especially connected were invited to send delegates to this gathering. Thus the Royal Society was represented by one of its secretaries and its foreign secretary. From the immortal Diary it appears that the first proposal that Pepys should join that Society was made to him in the spring of the year 1662 by his friend Dr. Timothy Clerke, who offered to bring him "into the College of Virtuosi and my Lord Brouncker's [P.R.S.] acquaintance, and to show me some anatomy; which makes me very glad, and I shall endeavour it when I come to London." Two years, however, elapsed before his election. From the minute-books of the Society it appears that he was unanimously elected and admitted on the same day (February 15, 1664)—a rapidity of procedure which contrasts with the much more leisurely action of the present day. He records that he "was this day admitted by signing a book and being taken by the hand by the President, my Lord Brunkard, and some words of admittance said to me. But it is a most acceptable thing to hear their discourse and see their experiments. . . . After this being done they to the Crowne Taverne, behind the 'Change, and there my Lord and most of the company to a club-supper."

The meetings of the Royal Society in those days must have been a good deal more lively than they are at present. Robert Hooke, the most fertile and inventive genius of his time, was then "Curator of Experiments," and brought forward at each meeting either some ingenious contrivance of his own or some device provided by one of the members. This constant and exciting variety of practical demonstration would be entirely after Pepys' heart, gratifying his spirit of curiosity and his keen desire to increase his knowledge in every direction. Another feature of the meetings could not but gratify one of his most characteristic proclivities—his sociability and love of congenial company. The evening adjournments to the "club-supper" at the Crowne Taverne behind the 'Change or to the Devil Taverne in Fleet Street would end off his day as he always delighted that it should end. These meetings for supper contained the germ of the Royal Society Club, the oldest extant records of which do not go back further than 1743. This club consists of a limited selection of fellows of the Society who still dine together at some restaurant on the evenings of the Society's meetings.

At the time of Pepys' election the Society met at Gresham College, but a few years afterwards moved to Arundel House. An effort was then being made to raise money for the purpose of building a house in which the "virtuosos" might hold their meetings and place their library and apparatus. Among the other fellows, Pepys was applied to for a subscription. Under date April 2, 1668, he writes, "with Lord Brouncker to the Royall Society, where they were just done; but there I was forced to subscribe to the building of a College and did give 40l."—certainly a generous donation at that time. He evidently had some reluctance to join in the scheme, for he thought that this canvassing for money "may spoil the Society for it breeds faction and ill will, and becomes burdensome to some that cannot or would not do it."

The Royal Society held its annual meeting for the election of the council and officers on St. Andrew's Day, November 30—a date which is still kept sacred for the same purpose. But some of the usages that were formerly in vogue have disappeared. Thus Pepys writes on November 30, 1668, "To Arundel House and there I did see them choosing their Council, it being St. Andrew's Day; and I had his cross in my hat, as the rest had, and cost me 2s." The diarist himself had already been nearly selected to serve on the council, so well did he stand in the esteem of his fellow members. Only three years and a half after his admission into the Society he records that "I was near being chosen of the Council, but am glad I was not, for I could not have attended, though, above all things, I could wish it; and do take it as a mighty respect to have been named there."

At last, at the end of twenty years from the time of his entry into the Royal Society, his associates showed the estimation in which they held him by electing him President on December 1, 1684. He was the sixth who filled that office in the history of the society. The council minute-book shows that he obtained twenty-nine votes out of thirty-nine, and that he was sworn in upon December 10. The council included at that time Sir Christopher Wren, Dr. Martin Lister, Robert Hooke, E. Halley, John Flamsteed (Astronomer Royal), John Evelyn, and Sir John Hoskyns. The difficulty which Pepys would have had in attending the meetings of council appears to have still continued after his election to the presidency, for he was only occasionally able to be present. Unfortunately, the Diary, which gives such a full and

faithful record of his daily life, stops short long before the date of his election to the chair of the Royal Society, so that we are without any memoranda of his own regarding what took place during his tenure of the office. The minute-books of the Society, however, furnish some interesting particulars.

One of the undertakings of the Royal Society during the time that Pepys presided over its business was the publication of the elaborately illustrated work of Francis Willughby, the "*Historia Piscium*." It was a somewhat costly production, so that several members of the Society agreed to subscribe for one or more plates, which were to be supplied at the cost of one guinea each. Pepys far surpassed all other subscribers in his generosity, seeing that he paid for no fewer than sixty plates. The book is appropriately dedicated to him, and when it was ready for issue the council, to mark its appreciation of his assistance (June 30, 1686), "ordered that a Book of Fishes, of the best paper, curiously bound in Turkey leather, with an inscription of dedication therein, likewise five others bound also, be presented to the President." On the same occasion the following amusing entry was made on the minutes:—"Ordered that the Society to encourage the measuring a Degree of the Earth do give E. Halley 50*l.*, or fifty Books of Fishes (!) when he shall have measured a degree to the satisfaction of Sir Christopher Wren, the President and Sir John Hoskyns." There is no record to show which alternative the future Astronomer Royal accepted.

Undoubtedly the most important event which occurred at the Royal Society during Pepys' term of office was the acceptance and publication of Newton's immortal "*Principia*." In the MS. journal-book of the Society under date April 28, 1686, it is recorded that Dr. Vincent "presented the Society with a manuscript Treatise intituled *Philosophiæ Naturalis Principia mathematica*, and dedicated to the Society by Mr. Isaac Newton wherein he gives a mathematical demonstration of the Copernican hypothesis, as proposed by Kepler, and makes out all the phenomena of the celestial motions by the only supposition of a gravitation towards the centre of the sun, decreasing as the square of the distances therefrom reciprocally. It was ordered that a letter of thanks be wrote to Mr. Newton and that the printing of the book be refer'd to the consideration of the Councill; in the mean time the book to be put into the hands of E. Halley, who is to make a report thereof to the Councill." On May 19 it was "ordered that Mr. Newton's book be printed forthwith in a quarto of a fair letter, and that a letter be written to him to signify the Society's resolution, and to desire his opinion as to the print, volume, cutts and so forth." On June 30 the council ordered "that the President be desired to licence Mr. Newton's book, dedicated to the Society." Accordingly the title-page of the famous quarto bears the licence in conspicuous print—"Imprimatur, S. Pepys, Reg. Soc. Praeses, Julii 5, 1686."

Pepys held the office of president for two years, and was succeeded on St. Andrew's Day, 1686, by the Earl of Carbery, by whom he was named one of the vice-presidents. Though not in any sense a man of science, he was distinguished among his contemporaries for his keen interest in scientific progress and his eager desire to acquire as much as he could of "natural knowledge." Though careful of his money, he could be generous where the interests of science appealed to him. The absorbing character of his work at the Admiralty and the enthusiastic devotion with which he applied himself to it no doubt prevented him from taking as active a share in the business of the Royal Society as he would have

wished to do. But among the distinguished men who during two centuries and a half have occupied the presidential chair there have been few more entitled to kindly remembrance than Samuel Pepys.

ARCH. GEIKIE.

COMPULSORY GREEK AT CAMBRIDGE.

IT is earnestly to be desired that every member of the Senate who is on the side of the Studies and Examinations Syndicate will record his vote in favour of their proposals on either Friday or Saturday, March 3 and 4, between the hours of 1-3 p.m. or 5-7 p.m.

The proposals of the syndicate have been in many places misrepresented. The committee which is opposing them heads its manifestoes "Defence of Classical Studies at Cambridge," but no one has yet attacked these studies. It is true that the proposals allow a modern language instead of either Greek or Latin, but every candidate must take one ancient language, and whichever he elects to offer for the Previous Examination he will have in the future to show a really respectable knowledge of that tongue. At present, as is demonstrated by the students of Newnham and Girton, and many others, and as letters in *NATURE* have shown, a mere smattering of Greek which can be "got up" in a couple of months is all that can be demanded in view of the existing state of education in our public schools.

Those who think no man can be cultivated without Greek (they do not say the same about women) often forget that the Greeks, who are held to have been incomparable educators, dispensed entirely with the study of dead or foreign languages. They did not educate their sons on a basis of ancient languages, they educated them on their own language and their own literature. The Romans, again, got on very well without studying dead languages. It is true that the educated men in ancient Rome studied the Greek authors, but Greek was to them a living language, and the intercourse between the thinkers and the doers of classical times was at least as close as between the French and British of our own day.

The supporters of the present proposals are often charged with encouraging undue specialisation. But what do we mean by specialisation? The term is usually used to denote the study of one subject to the exclusion of others. If this definition be sound it is the advocates of what is called compulsory Greek who are the culprits. A boy begins Latin, say, at eight or nine, and shortly afterwards takes up Greek, and for the next nine or ten years, at many of our public schools, does comparatively little else. He has specialised to such an extent, and his intellect is so cramped and dulled by the process, that he not unfrequently fails to reach the low standard of the Previous Examination when he leaves school. Even if he has a real gift for classics he is often but a narrow specialist. Fifty-five years ago a Mr. John Smith published in his "*Sketches of Cantabs*" an appreciation of the classical man of the middle of the last century. "He seldom reads an English work, and of the history of his native country is strangely, almost supernaturally, ignorant. Passing occurrences do not affect him. He doesn't care how many men are slaughtered on the banks of the Jhelum. His heart is at Marathon, his sympathies with the great Hannibal at Cannae." We have improved since then, but the type is not extinct.

It is to be regretted that the proposals do little to encourage science. It must distinctly be understood that the alternative to Greek or Latin is not science,